Viraj Sule

847-749-7533 • Elk Grove Village, IL • virajsule12@gmail.com • www.virajsule.com

EDUCATION

University of Wisconsin-Madison | B.S. in Computer Science and Data Science Aug.2020 - Dec. 2023

- Relevant Coursework **(GPA: 3.7)**: Programming III **(Java)**, Data Programming II **(Python)**, Data Modeling II **(R)**, Algorithms, Artificial Intelligence, Operating Systems **(C)**, Database Management Systems **(C++, SQL)**, Building User Interfaces **(React, Bootstrap, JS)**

EXPERIENCE

Epic Systems – Verona, WI

Software Engineer May 2024 - Present

Software Engineer Intern May 2023 - Aug. 2023

- Designed and implemented new reporting data models and migrations for compliance to industry regulations
- Optimized SQL query performance by 34% in various financial risk, cost, and utilization reports, increasing efficiency for analysts and providers as well as increasing maintainability of these queries internally **(SQL, MUMPS)**
- Architected new workflows for users by developing new reports and views that would allow for further analysis and investigation into certain populations that were decided on via thorough investigation with various customers/users **(TypeScript, React, C#, SQL)**
- Organized triage for all fixes and code review throughout the team to meet fix deadlines and be aware of overall team bandwidth
- Designed and developed a shared, trackable Handoff feature for nurses and doctors to use when starting and ending shifts
- Streamlined physicians' documentation within Handoff through a new task list that allows users to efficiently view, manage, and track different patient/service-related tasks in one clean space **(TypeScript, React, C#)**

Sony PlayStation – Madison, WI

Software Engineer Intern May 2022 - Aug. 2022

- Delivered key features of the PS Direct website's web checkout as part of a short-cycle, agile, iterative development scrum team
- Implemented user accessibility features that allowed the PD Direct website to serve disabled customers better **(React, Jest)**
- Supported the addition of new features to the PS Direct website, such as pre-order and order modification, through development related to the web checkout cart **(React, GraphQL)**

Surus – Lake Bluff, IL

Data Science Engineer Intern May 2021 - Sept. 2021

- Built internal data visualization tools to support client insights and sales presentations **(Python, AWS, Tableau)**
- Automated data pipelines from Postgres to Tableau to deliver regularly updated client analytics **(Python, AWS)**
- Resolved missing and inaccurate precinct shapefiles across all 102 Illinois counties **(QGIS, Tableau, Python)**
- Developed scripts to standardize multi-million-row election datasets from the Illinois State Board of Elections **(Python, R)**

PROJECTS

Gains | iOS Fitness App | Swift • SwiftUI • Swift Charts • Python • PostgreSQL • AWS • Docker | https://github.com/virajsule12/Gains

A full-stack iOS fitness app for structured session logging, progress analytics, and social performance comparison with friends.

- Designed a relational PostgreSQL schema for lift sessions, sets, time-series metrics, and friendships with soft-state workflows
- Implemented dynamic, interactive progress visualizations with selectable timeframes and multi-user overlays
- Developed a secure friend system with request workflows, soft-state relationships, and privacy enforcement
- Built a REST API to support session logging, derived strength metrics (e1RM), and timeframe-based progress series and summaries
- Integrated async networking, secure authentication, and real-time UI updates across a multi-tab SwiftUI app
- Dockerized the backend and database to support isolated development, reproducible environments, and safe migration workflows.

CompSci Classroom | Web App | NodeJs • JavaScript • HTML • CSS • Azure • MySQL | https://github.com/virajsule12/CSC

A web-based learning platform built specifically for computer science, supporting organized creation and submission of programming assignments.

- Built a scalable backend to store and manage application data and securely execute/analyze student-submitted code
- Designed and implemented a relational MySQL database schema to support users, courses, and programming assignments
- Developed a responsive, user-friendly frontend for navigating assignments and coursework for various classes
- Deployed and hosted cloud-based services to ensure high availability and reliable access
- Integrated an in-browser development environment enabling students to write, run, and submit code directly within the platform

AI Resume Analyzer | Web App | React • OpenAI • AWS • Python | https://github.com/virajsule12/AI-Resume-Analyzer

An AI-powered web application that analyzes uploaded PDF resumes against job descriptions and returns structured, actionable feedback.

- Implemented a FastAPI backend to extract, validate, and process resume text before generating structured AI analysis results
- Developed an interactive frontend to handle file uploads, asynchronous requests, and dynamic rendering of structured feedback
- Deployed the system on AWS EC2 using Nginx reverse proxying and systemd services to support production-grade hosting
- Engineered secure prompt design and strict validation to protect against prompt injection and enforce schema-compliant AI outputs

AWARDS

- 1st Place in IL for SQL Database Fundamentals | Business Professionals of America | Earned 2020
- Dean's list | Earned 2021, 2022
- National Merit Scholar | Earned 2019

SKILLS

Python | Java | R | Javascript | C | C# | C++ | TypeScript | HTML | CSS | SQL | NodeJS | ReactJS | Swift | AWS | Azure | Linux